

REMARKS/ARGUMENTS

Claim Amendments

The Applicant has amended claims 1, 15, and 17. Claims 3 and 19 have been canceled. Applicant respectfully submits no new matter has been added. Accordingly, claims 1, 2, 4-12 and 14-18, and 20-23 are pending in the application. Favorable reconsideration of the application is respectfully requested in view of the foregoing amendments and the following remarks.

Claim Rejections – 35 U.S.C. § 102(e)

Claims 1-5, 7-12, 14, 17-21 and 23 stand rejected under 35 U.S.C. 102(e) as being anticipated by Jensen et al (US 7,149,878). The Applicant has amended the claims to better distinguish the claimed invention from Jensen. The Examiner's consideration of the amended claims is respectfully requested.

The Applicant has amended claims 1 and 17 to overcome the §102(e) rejections. Claim 1 now recites a dedicated direct path between the special-purpose register file and memory for loading said special-purpose access register file from memory. Support for this amendment is found on page 9, lines 1-10 of the Applicant's specification.

Jensen discloses an apparatus and method that enables a multiple instruction set architecture (ISA) CPU to distinguish between different program instructions corresponding to different ISAs during execution of a multiple-ISA application program. Jensen also discloses a selection logic having a plurality of boundary address registers that partition the address space into a plurality of address ranges corresponding to the plurality of ISA decoding modes.

Jensen does not disclose a dedicated direct path from the memory of the computer system to the special-purpose register file. The Examiner references FIGs. 5 and 6 as disclosing a dedicated interface. However, Jensen does not provide a dedicated direct path from the memory to the register file. In FIG. 5 of Jensen, the various pipeline stages of the processor are depicted but not any path from the memory

to the boundary address registers. In FIG. 6 of Jensen, the boundary address registers are only coupled to the address evaluation logic and not any memory.

In contrast, the Applicant's invention provides a direct dedicated path between the memory and the special-purpose register to allow transfer of memory address calculation in parallel with other data being transferred to and/or from the general register files.

In regards to claims 12 and 14, the Examiner stated that Jensen discloses that the memory address calculation information is in the form of implicit memory access information. The Applicant respectfully disagrees. As explained in the Applicant's specification on page 8, lines 1-13, implicit memory access information does not directly point out a location in the memory, but rather includes information necessary for determining the memory address of some data stored in the memory. Jensen discloses boundary addresses that partition the address space into a plurality of address ranges corresponding to the plurality of ISA decoding modes (see Col. 4, lines 10-19). The boundary addresses do not provide any information on memory addresses but rather information for the selection of the correct ISA mode.

Therefore, Jensen does not disclose all the elements recited in FIG. 1. Claim 17 recites limitations analogous to claim 1 which are also not disclosed in Jensen. Claims 2, 4, 5, 7-12, 14, and 23 depend from amended claim 1 and recite further limitations in combination with the novel elements of claim 1. Claims 18, 20, and 21 depend from amended claim 17 and recite further limitations in combination with the novel elements of claim 17. Therefore, the allowance of claims 1, 2, 4, 5, 7-12, 14-18, 20, 21 and 23 is respectfully requested.

Claim Rejections – 35 U.S.C. § 103(a)

Claims 6, 15-17, and 22 stand rejected under 35 U.S.C. 103(a) as being unpatentable over Jensen in view of Aikawa et al. (US 5,371,865). The Applicant has amended the claims to better distinguish the claimed invention from Jensen and Aikawa. The Examiner's consideration of the amended claims is respectfully requested.

Claims 1, 15, and 17 have been amended. In regards to claims 1 and 17, claims 1 and 17 now recite a dedicated direct path between the special-purpose register file and memory for loading the special-purpose access register file from memory.

Jensen does not disclose a dedicated direct path from the memory of the computer system to the special-purpose register file. As discussed above, FIGs. 5 and 6 of Jensen do not disclose a direct path between the memory and the boundary access files. In contrast to Jensen, the Applicant's invention provides a direct dedicated path between the memory and the special-purpose register to allow transfer of memory address calculation in parallel with other data being transferred to and/or from the general register files.

The addition of Aikawa does not make up the missing elements. Aikawa does not disclose the dedicated path between the memory and the special-purpose register. In addition, Aikawa does not disclose a dedicated special purpose register file which is separate from other general register files. Aikawa merely discloses a generalized register performing several functions. In addition, Aikawa merely discloses a link between a memory and a register file which is not a special purpose register file.

In regards to claim 15, claim 15 has been amended and now recites a dedicated direct path between the special-purpose register file and the dedicated cache for loading the special-purpose access register file from the dedicated cache. Support for this amendment is found on page 11, lines 15-22 and FIG. 5 of the Applicant's specification.

Jensen and Aikawa do not teach or suggest a direct dedicated path between the dedicated cache and the special-purpose register file. Aikawa does not disclose a dedicated special purpose register file which is separate from other general register files. Aikawa merely discloses a generalized register performing several functions. In addition, Jensen, as the Examiner has stated, does not disclose a dedicated cache.

Therefore, Jensen and Aikawa, either separately or in combination, do not teach or suggest all the elements recited in independent claims 1, 15 and 17. Claim 6 depends from amended claim 1 and recites further limitations in combination with the novel elements of claim 1. Claim 16 depends from amended claim 15 and recites

further limitations in combination with the novel elements of claim 15. Claim 22 depends from amended claim 17 and recites further limitations in combination with the novel elements of claim 17. Therefore, the allowance of claims 6, 15-17, and 22 is respectfully requested.

Prior Art Not Relied Upon

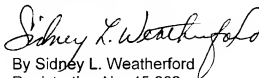
In paragraph 9 on page 9 of the Office Action, the Examiner stated that the prior art made of record and not relied upon is considered pertinent to the Applicant's disclosure. None of the prior art of record discloses all of the elements recited in the Applicant's claimed invention.

CONCLUSION

In view of the foregoing remarks, the Applicant believes all of the claims currently pending in the Application to be in a condition for allowance. The Applicant, therefore, respectfully requests that the Examiner withdraw all rejections and issue a Notice of Allowance for all pending claims.

The Applicant requests a telephonic interview if the Examiner has any questions or requires any additional information that would further or expedite the prosecution of the Application.

Respectfully submitted,

A handwritten signature in black ink, appearing to read "Sidney L. Weatherford". The signature is fluid and cursive, with the first name "Sidney" being the most prominent part.

By Sidney L. Weatherford
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Date: August 22, 2007

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